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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,414	07/02/2001	Jun Matsuzaki	Q63842	8685

7590 04/01/2003  
Sughrue Mion Zinn  
Macpeak & Seas  
Suite 800  
2100 Pennsylvania Avenue NW  
Washington, DC 20037-3213

EXAMINER

MAKI, STEVEN D

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 04/01/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application N .

09/806,414

Applicant(s)

MATSUZAKI ET AL.

Examiner

Steven D. Maki

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1733

-- Th MAILING DATE of this communication appears on th cover sheet with the correspondence address --

Peri d f r R ply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_ .
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disp sition of Claims

- 4) ☒ Claim(s) 1,3-6 and 8-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-6, 8-23, 28 and 29 is/are rejected.
- 7) ☒ Claim(s) 24-27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Pri rity under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☒ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_ .  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_ .
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8 . 6) ☐ Other: .

- 1) The certified copy of Japan 11-218001 but not Japan 11-218002 has been received.
- 2) Figures 13A and 13B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- 3) The disclosure is objected to because of the following informalities: the specification (e.g. page 1) refers to the claims. It is suggested to appropriately delete the reference to the claims in the specification.

Appropriate correction is required.

- 4) The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5) Claims 8, 11, 28 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 is confusing and ambiguous (the description of the location of end portion grooves is confusing).

Claim 11 ambiguously refers to "the other auxiliary groove" and "the other main groove".

In claim 28, it is unclear how "may" affects the scope of the claim. It is suggested to change "may" to --is--.

6) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8) Claims 1, 3-6 and 8-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Landers et al (US 5824169).

Landers discloses a pneumatic tire having a tread comprising two sets of main grooves (circumferential grooves 16 and lateral grooves 14) and sipes 17. The claimed auxiliary groove reads on the inclined portion of sipe 17. The claimed end portions read on the end portions of the sipes 17 which connect the inclined portion of the sipe 17 to the circumferential grooves. In any event: it would have been obvious to one of ordinary skill in the art to arrange the sipes of Landers et al such that the inclined portions of the sipes 17 are "substantially along the shorter diagonal line" of the block / "inclined in the same direction as that of the shorter diagonal line" since Landers et al teaches arranging sipes 17 in the middle portion of the blocks and in a direction opposite the direction of inclination of the lateral grooves to control the variation of the direction of principal lug stiffness to improve the lateral stability, the handling and the wear properties of the tire.

As to the dependent claims, see Landers et al's teachings regarding the shape, size, orientation and location of the sipes 17. As to claim 3, the claimed length of the auxiliary grooves would have been obvious in view of the length of the inclined portion of the sipe 17 shown and suggested by Landers et al. As to claim 4, the claimed angle difference of  $\pm 20$  degrees would have been obvious since Landers et al inclines the inclination portion of the sipe 17 at about the same angle as that for the shorter diagonal line (the angle therebetween therefore being about zero degrees). As to claim 5, the limitation of the auxiliary grooves being arranged substantially on the shorter diagonal would have been obvious since Landers et al shows at least for the small pitch blocks the inclined portion of the sipe 17 being on the shorter diagonal. See figures 1 and 3. As to claim 6, the claimed depth at least 30% of the main grooves for the auxiliary grooves would have been obvious in view of Landers et al's suggestion to use depth  $h_2$  for sipes 17. As to claim 8 (location of end portion grooves) and claim 9 (obtuse angle), the limitations therein would have been obvious in view of the shape and orientation of the sipes 17. As to claim 10 (angle less than 30 degrees), the limitation therein would have been obvious since Landers et al shows the end portions of sipes 17 as being inclined at about the same angle as the lateral grooves (the angle therebetween therefore being about zero degrees). As to claim 11 (one auxiliary groove / other auxiliary groove), note that Landers et al locates sipes 17 in plural block rows (a block row on each side of the EP). As to claim 13 (depth of end portions), the limitation therein would have been obvious in view of the depth of sipe 17 shown and suggested by Landers. As to claim 14 (distance between end portions and main grooves), the

limitation therein would have been obvious since Landers shows the end portions of the sipe 17 as being relatively close to the main grooves.

9) Claims 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landers (US 5824169) in view of Koyama et al (US 6003575) and/or Tsuda (US 6050313).

As to claims 15-23, it would have been obvious to one of ordinary skill in the art to connect the inclined portion of the sipe 17 and the end portions of the sipe 17 smoothly (curve the corners of the sipe) in view of Koyama et al (compare figure 13 with figure 3) and/or Tsuda (figure 4) which suggest connecting a central portion and end portions of a sipe smoothly (in a curved manner) – the both end opening sipe of Tsuda et al and Koyama et al generally having the same shape as the both end opening sipe of Landers et al.

#### Allowable Subject Matter

10) Claims 24-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 28 and 29 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Although chamfering of corners of blocks is known per se in the tread art as shown by Japan '505 (JP 2-182505) and Europe '989 (EP 602989), the prior art of

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record fails to motivate chamfering the upper corners of the specific sipe 17 of Landers et al.


Remarks

- 11) The remaining references are of interest.
- 12) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is 703-308-2068. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Steven D. Maki  
March 24, 2003

  
STEVEN D. MAKI 3-24-03  
PRIMARY EXAMINER  
GROUP 1300  
AU 1733